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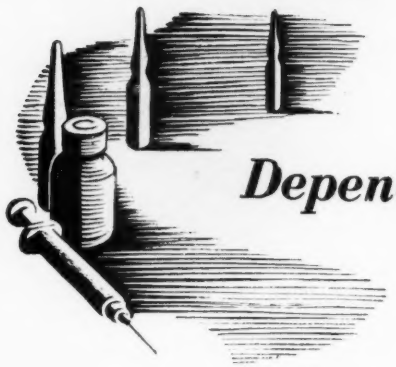

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Effects Resulting from Atomic Bomb Explosion

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ST. PETERSBURG

The effects of the atomic bomb explosion on humans and structures will depend upon whether the explosion is in the air, on the ground or in the water. Little is known of the effects on buildings or people of a bomb exploded on the ground. In New Mexico the bomb was on a 100 foot tower and no buildings or people were involved. It is known, however, that the sands of the desert around the blast were fused and remained radioactive for some time. It is estimated that at Nagasaki the bomb exploded at an altitude of about 800 feet.[1]

The most striking difference between the explosion of an atomic bomb and an ordinary TNT bomb is in the magnitude of the blast wave and in the amount of energy released which is in the form of heat, light and ionizing radiation.[2]

The products of fission of a bomb exploded beneath the water mix intimately with sea water and create a poisonous radioactive spray that fills the air and mushrooms outward in all directions. It is carried by the wind and, as it settles to the earth, covers everything in the entire region.

The pressure wave of an atomic bomb differs from that of an ordinary explosion in the duration of the positive pressure phase, the size of the area over which high pressures are exerted and the force of the blast wave. Pressure from an ordinary explosion lasts only a few milliseconds, that from an atomic bomb for nearly a second. It was this long, intense wave that caused the extensive damage to buildings in Hiroshima and Nagasaki. In Hiroshima almost everything within a radius of a mile from the center of the explosion was completely destroyed except heavily reinforced concrete structures, and these were entirely gutted. In Nagasaki, total destruction spread over an area of about 3 square miles, and it was evident that the blast effect was greater than in Hiroshima.[2]

The heat of the blast was very intense. Its duration was of insufficient time to raise the temperature of many materials to the kindling point, except in cases where conditions were ideal. In both cities some fires close to the center of the explosion were undoubtedly started by the radiation of heat. The majority of fires were of secondary origin, starting from electrical short circuits, broken gas lines, stoves and like sources. The conflagration at Hiroshima caused high winds to spring up as air was drawn in toward the center of the burning area, and a so-called "fire storm" was created. The wind velocity in the city had been less than 5 miles per hour before the bombing, but as the fire spread, the fire wind attained a velocity of 30 to 40 miles per hour. These winds restricted the spread of the fire from the periphery, but increased the fury of the fire toward the center.[2]

Flash ignition of dry combustible material was observed as far as 6,000 feet from the center of the explosion in Hiroshima, and 10,000 feet from the center of the explosion in Nagasaki. There was evidence to show that fires had been started by flash ignition only to be put out by the blast wave that followed.[2]

The casualties sustained by the inhabitants of both cities were due to burns, mechanical injury, neutrons and gamma radiation. In Hiroshima, 60 per cent of those who died immediately, and in Nagasaki, 95 per cent of those who died immediately, did so from burns.[3]

Flash burns caused by ultraviolet light appeared almost immediately with progressive changes taking place over a period of a few hours. It has been estimated that about 90 per cent of the burns suffered by patients who reached the first aid stations were of second degree. Burns were limited to that part of the body facing the center of the explosion. Clothing of any sort gave protection. Those close to the explosion suffered burns beneath their clothing. Skin areas beneath dark colored material were burned more than those under light colored materials.[2]

Read before the Pinellas County Medical Society, Nov. 6, 1947.

BLAST INJURIES

No estimate of the number of deaths or symptoms due to blast pressure could be made. The pressures developed on the ground under the explosion were not sufficient to kill more than those people who were very near the center of damage.[2]

RADIATION INJURIES

The radiations which caused injuries were primarily those created within the first second after the explosion. A few may have occurred later, but all within the first minute. It was estimated that gamma rays and neutrons caused about 7 per cent of the deaths.[2] The disintegration products of plutonium fission consist of fission fragments, neutrons and beta particles, and cause a transformation of the remainder of the mass into heat, gamma rays and radiant energy, the last named including ultraviolet, visible and infrared radiation.[5] The gamma rays and neutrons emitted instantaneously at Nagasaki were enough to have killed or injured nearly everyone exposed within a radius of three quarters of a mile. The neutrons were one of the most important lethal agents within a radius of 1,000 meters from the point of explosion.[3] The number of high speed neutrons beyond the 1,000 meter radius was much smaller than the number of gamma ray quanta due to the more rapid absorption of the neutrons. The biologic effect of neutrons is, however, at least seven times greater than that of gamma rays; so this smaller number of neutrons may have produced an appreciable biologic effect, and neutrons as a source of penetrating radiation within the 1,000 meter to 1,500 meter area cannot be eliminated.[3]

A study of patients with no other type of injury than radiation showed the effects of severe, moderate and mild injury. In those who had maximum irradiation effects, nausea and vomiting developed several hours after the explosion. Fever, diarrhea, purpura, ulcerations of the mucous membrane and leukopenia developed within four to seven days, and death usually occurred before ten days. In those who sustained moderate doses of gamma rays and neutrons, symptoms developed after seven days. These people had nausea and vomiting several hours after the explosion, but no definite symptoms appeared until seven to ten days later. The syndrome of moderate radiation injuries was characterized by epilation, diarrhea, fever, leukopenia and anemia. Complications such as occur in agranulocytic angina developed and were difficult to control. The mortality rate in those having this syndrome was about 50 per cent.[4]

Those who received a mild dose of radiation had no definite symptoms up to about the tenth day. From then till the thirtieth day, epilation, loss of appetite, malaise, fever, diarrhea, anemia and petechiae developed. Those receiving mild doses recovered unless they had other severe injuries or poor health.

The severe vomiting and intense diarrhea were particularly resistant to treatment. Many people died as the result of these gastrointestinal disturbances which led to dehydration and acidosis. Autopsies were done on individuals who had received various degrees of radiation injury, and the important pathologic changes were found in the bone marrow and lymphatic organs. There was almost complete disappearance of all cells of the myelopoietic and erythropoietic series. In all but the most severely irradiated patients regeneration of the bone marrow was evident within seven to ten days after the injury. The type of tissue which regenerated varied considerably, and it was frequently noted after three or four weeks that only macrophages, plasma cells and lymphocytes and very few definite cells were being formed. In other cases there was rapid development of white and red cell elements. The lymph nodes and lymphatic organs were badly damaged. Recovery was slow, and in many patients who died several months after the explosion, only a few adult type lymphocytes were found in the lymphoid tissue.[4]

Men who received enough radiation to produce symptoms did not have spermatozoa and most of the spermatogenic tissue was replaced by proliferating cells of Sertoii. Tissues of the female reproductive system were affected to a much smaller extent.[4]

The subject of persistent radioactivity was given special study. Direct measurements of persistent radioactivity were made at the time of the investigation. Calculations were made of the graded radiation dosage, namely, the total amount of radiation which could have been absorbed by one person. The calculations showed that the highest dosage which would have been received from persistent radioactivity at Hiroshima was between

6 and 25 r of gamma radiation; the highest in Nagasaki was between 30 and 110 r. In interpreting these findings it must be understood that to get these dosages, one would have had to remain at the point of highest radioactivity for six weeks continuously from the first hour after the bomb exploded.[3]

On the basis of rough estimates approximately 85,000 persons, or 30 per cent of the population in Hiroshima, and 50,000 persons, or 25 per cent of those in Nagasaki, required medical care on the day of the bombing.[3]

There was total disruption of transportation. Electricity, water and gas supplies were put out of commission. Hospitals were destroyed as well as other buildings, and those that were not destroyed suffered damage as the result of having their windows blown in and their equipment scattered about. The severe damage to the water supply system consisted of breaks in the large water mains and almost all of the distributing pipes in the areas which were affected by the blast.[3]

The Japanese were poorly equipped to take care of the injured. Most of the medical stores were depleted, and the treatment is reported to have consisted of vitamins, liver extract and an occasional blood transfusion.[4]

In both Hiroshima and Nagasaki the tremendous scale of the disaster largely destroyed the cities as entities. In addition to the huge number of persons who were killed or injured, a panic flight of the population took place from both cities immediately following the atomic explosions. One of the most significant effects of the atomic bomb was the sheer terror which it struck into the people of these bombed cities. This terror, resulting in immediate hysterical activity and flight from the cities, had one especially pronounced effect. Persons who had become accustomed to mass air raids had grown to pay little heed to single planes or small groups of planes, but after the atomic bombings, the appearance of a single plane caused more terror and disruption of normal life than the appearance of many hundreds of planes had ever been able to cause before.[3]

CONCLUSION

The atomic bomb explosion destroyed structures through a terrific blast wave that lasted almost a second. Injuries to people resulted from falling buildings and flying debris, from burning structures and from the radiation of ultraviolet rays and ionizing radiation. The severity of the injury produced by ionizing radiation in an individual was relative to his distance from the center of the explosion and, if he was under cover, to the type of building in which he was staying. It has been estimated that in Nagasaki the radiation intensity at a distance of 1,250 meters from the point of explosion was 473 r.[3]

It is believed that the mortality rate for all types of injuries could have been reduced if electrolite solutions, plasma, whole blood and penicillin had been available.

REFERENCES

1. Timmes, J. J.: Radiation Sickness in Nagasaki; Preliminary Report, U. S. Nav. M. Bull. 46:219-224 (Feb.) 1946.
2. The Atomic Bombing of Hiroshima and Nagasaki, The Manhattan Engineering District.
3. Larkin, J. C.: The Distribution of Radiation in the Atomic Bombing of Nagasaki, Am. J. Roentgenol. 55:525-532 (May) 1946.
4. LeRoy, G. V.: The Medical Sequelae of the Atomic Bomb Explosion, J. A. M. A. 134:1143-1148 (Aug. 2) 1947.

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On Data of Notable Interest

VOLUME XXXIV
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Cervical Lesions—Diagnosis of Malignant Disease by Vaginal Smear

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TAMPA

The purpose of this paper is to direct attention to a prevalent disease that is often neglected and to present a new method for diagnosing cancer in its early stages. It is hoped that interest may be stimulated in correcting the physician's attitude toward the disease and that many women may be spared much suffering, others possibly an early death.

Lesions of the cervix occur with greater frequency than elsewhere in the female anatomy and, if not entirely overlooked, too often receive inadequate care when found. An analysis of 3,167 private gynecologic cases during the past four and one-half years reveals disease of the cervix in 1,112 cases, or an incidence of 35 per cent. Simple erosions occurred in 727 cases, erosions with nabothian cysts in 222 cases, erosions with lacerations in 88 cases, cervical polypi in 35 cases, cancer in 22 cases, stenosis of the cervix in 14 cases and fibroid tumors of the cervix in 2 cases. Acute cervicitis and condylomata acuminata are intentionally omitted.

It appears that in the last few years lesions of the cervix are increasing in frequency, especially in the young married women and those that have recently been confined. In these groups one finds the disease in perhaps 50 per cent of the cases. One must keep in mind, however, that these are all gynecologic patients seeking relief, and this percentage would not apply to women in general.

Rarely are lesions seen before puberty. Their absence is perhaps due to the fact that the cervix and endocervix are covered with squamous epithelium which may act as a protective mechanism prior to the menarche. With the advent of the menses with its cyclic phases, changes rapidly take place. With marriage come infections, the use of contraceptives, douching with strong alkaline and caustic agents, stem pessaries, tampax and foreign bodies; with pregnancy the trauma of labor and injuries by forceps, and later the menopausal changes, all of which predispose the cervix to disease over a period of many years.

Since lesions of the cervix are so frequently encountered in women, some serious thought should be given prophylaxis against cervical malignant disease. It was suggested by Kennedy[1] that erosions of the cervix which often lead to a malignant condition be referred to as "pseudo-adenoma of the cervix" in order to direct attention to the malignant potentialities and lead to proper prophylactic care. He believed that by adequate repair of lacerations 95 per cent of later malignant disease can be prevented. Of recent years mention of cervical lesions perhaps makes physicians think first of malignancy, and this may be well, for not until we become cancer-conscious will we be able to detect cancer in the early stage, at which time it is most susceptible to treatment.

This author's study suggests the lack of understanding of the cancer program on the part of many women. The majority who still present themselves in the late stages of cancer explain that they were waiting for their menstrual period to cease, thinking the physician would not examine them while bleeding. The pallor and the unpleasant odor not infrequently betray the diagnosis even before the patient is put on the table. Others will give a history of having numerous diseases during the past ten years and having medical treatment, but not having had a vaginal or pelvic examination during the period. Here the physician overlooks a great responsibility as the patient is entitled to better care.

The approach to the problem of cure has been most discouraging, for while there has been a great improvement in treatment of uterine cancer, only a slight decrease in the death rate has occurred within the past twenty-five years. This has been due to the difficulty in making an early diagnosis.

During a course of study given at the University of Georgia which I attended last May, the pathologist made the statement that most women when presenting themselves for treatment of cancer of the uterus had had the disease from nine to twelve years. Here a monumental piece

Read before the Northeast Medical District Meeting, St. Augustine, Nov. 1, 1947.

of work has been done by Pund and Auerbach[2] upon preinvasive carcinoma of the cervix uteri. After surgical removal, 1,200 cervices were serially blocked, and microscopical sections were studied. In 47 cases preinvasive carcinoma was found, an incidence of almost 4 per cent. In no instance had cancer been diagnosed by gross appearance. The ages of the patients varied from 23 to 56 years. Six were in the third decade of life. The average age of the 43 from whom this information was obtained was 36.6 years. This would put the reproductive period as the time of onset of early cancer of the cervix.

The microscopic lesions were located on the gland-bearing portion of the cervical lining at the junction of the squamous and columnar epithelium. The authors concluded that most carcinoma of the cervix arises from the junctional endocervix. A concurrent study of early invasive carcinoma was also made, and the average age was established at 42 years. This indicated early invasion starts six years after the preinvasive phase and frank cancer may be delayed another six years. At Bellevue Hospital a case in which there was minimal histologic invasion was followed for seven years by Taylor and Guyer[3] before clinical carcinoma developed. By repeated vaginal examinations they were finally able to recognize the cancer before it had progressed beyond the cervix.

At other medical centers there have been cases in which carcinoma was suspected, but in which biopsy and curettage gave negative evidence for months or years, finally to become positive. If cancer is diagnosed in the preinvasive stage, the chances of cure are excellent.

Since carcinoma exists in the preinvasive and latent stages six to twelve years before the development of definite clinical symptoms, how can we detect it? Here the vaginal smear has much to offer. It was my good fortune in 1943 while at the New York Hospital (Cornell University) to meet and make a friend of Dr. George N. Papanicolaou. This was just prior to the publishing of his monograph on "The Early Diagnosis of Uterine Cancer by the Vaginal Smear." At that time he graciously consented to examine and has since examined smears done on my patients.

The method is simple, economical and highly accurate in diagnostic results. It is dependent upon the exfoliation or desquamation of cells from the epithelium lining the uterus and vagina. As with all body surfaces covered by epithelium, there is a constant shedding of the upper cell layer, later to be replaced by deeper cell layers which in their turn are shed. The superficial cell layers of all tumors of the uterus are also subject to continual exfoliation, and the exfoliation is proportional to the proliferative activity of the epithelium. A more pronounced exfoliation would, therefore, be expected in cancer than in normal epithelium. The cells that are shed mix freely with the vaginal fluid and are found singly and in clusters. Likewise, leaves discovered in a stream not only prove the presence of trees in the vicinity, but present definite characteristics of the species growing there.

Papanicolaou and Traut[4] stated: "While all cancers shed their cells, the rate of exfoliation is somewhat variable and the number of malignant cells found in the vaginal smear depend upon the type of growth, its stages of development and the existence and amount of blood being discharged from the uterus. The adenoma malignum, a slow shedding cancer when located in the fundus of the uterus, in the absence of bleeding may be missed by the vaginal smear. Obviously fluid obtained from the endocervix and endometrium offers greater chances for finding the malignant cells in this type of case." A cannula therefore has been devised by Dr. Cary of Cornell for obtaining fluid from these sources.

The greatest advantage of the vaginal and endometrial smear is that it presents positive evidence of early malignant disease before the appearance of any definite clinical symptoms. Due to its simplicity the smear can be taken in any office and with little equipment; in fact, the patient can be shown how to obtain vaginal smears from herself. The method is inexpensive and can be repeated at desirable intervals.

It is indicated in patients under 40 years of age whose symptoms are in question but not indicating curettage. In all postmenopausal bleeding when there is no visible lesion, it should precede curettage; in cervical lesions slightly suggestive of malignant change, it should precede cautery or conization, at which time a biopsy is taken. It should be used in all cases of vaginal bleeding when the cause cannot be explained. Also, it is useful in following the results of radiation therapy, and finally it should be used in all cases of suspected malignant disease.

It is not intended that the vaginal smear replace the biopsy or curettage, but that it sup-

plement or precede them. There are cases in which the vaginal smears were definitely positive when repeated curettage failed to reveal the malignant changes which were later found upon the removal of the uterus.

Accuracy of the method can be derived from reports of the three men who have done practically all the work prior to 1946. Meigs[5] at Massachusetts General Hospital reported an error of 10 per cent in endometrial carcinoma and 4 per cent in cervical carcinoma. Ayre[6] at McGill University reported a 6 per cent error in proved carcinoma. Papanicolaou[7] formerly reported a 9.3 per cent error in primary carcinoma of the uterus and 3.2 per cent failure in demonstrable lesions of the cervix. Since the specimen has been obtained from the endocervix and endometrium, his error in endometrial cancer has been decidedly reduced.

Precautions[4] prior to taking the smear are: Do not disturb the vaginal contents by examination or treatment. Douching or bathing should be avoided as it will dilute or wash away the cellular deposits for several hours. In the presence of much fluid or blood several smears should be made as dilution has occurred, making it difficult to locate the malignant cells. The name and number of the patient and the dates on which smears are taken should be marked in advance on the slides with a diamond pencil. Now that smears are obtained from the endocervix, endometrium and vagina, the letters e.c., e.m. and v. signify the source from which the fluid is obtained. Smears can be preserved in the fixing fluid for about one week.

The method of taking vaginal smears is as follows: A slightly curved glass tube 6 inches long and 1/5 inch in diameter with a rubber bulb attached for suction is introduced in the posterior fornix. The bulb, having been compressed, is now released, aspirating vaginal fluid into the tube as it is moved from one vaginal fornix to the other. The pipet is then withdrawn, and with explosive pressure on the bulb the contents are deposited on a clean glass slide. The pipet is then used for evenly spreading the material as one would in making a malarial smear. Immediately the slides are dropped into a solution of equal parts of 95 per cent alcohol and ether. Drying the smears should be carefully avoided as it results in loss of sharp outlines of the cells and in change of their staining reactions.

The endocervical and endometrial smears are not so easily obtained, and the procedure should never be carried out in the presence of infection or a possible pregnancy. With a short vaginal speculum in place, one takes the Cary cannula attached to a 10 cc. glass syringe and gently introduces the curved metal cannula through the endocervix into the uterine cavity. With suction created by the syringe the cannula is carefully withdrawn. The contents are deposited on the the slide and fixed and stained exactly as in the vaginal smear. I have broken the tip from many 10 cc. syringes and now apply the rubber bulb used on the vaginal tube to the cannula for making the endometrial smear. Doing so necessitates the assistant maintaining pressure on the bulb while one introduces the cannula.

For shipping the slides a round bottle 1 1/2 inches in diameter and 3 inches in length with screw top will be adequate for two slides. A paper clip on the end of the slide will prevent rubbing one against the other.

Since ether and alcohol form inflammable material rejected by the mails, a method facilitating an early report was desirable. To Dr. Ayre of McGill is, I believe, due the credit for the glycerine method. An applicator tightly wrapped on one end with cotton is introduced 3/4 of an inch into the cervix, then rotated and withdrawn. The applicator is now rolled over the clean glass slide, which is immediately dropped into the alcohol and ether mixture for ten minutes for fixing. The slides are removed, and as soon as they are dry, a few drops of glycerine are placed on the slides with faces together. They can be mailed in the usual malarial slide containers.

Recent publicity of the vaginal smear method by lay magazines is likely to create a demand for its extensive use. Unfortunately, few men are trained for interpretation of the smears. It is estimated that it would take a pathologist well trained in tissue diagnosis of cancer about one year to master the cytology of the vaginal smear. Naturally few have responded to this training. Let us not build up a demand for this excellent method of diagnosis beyond that which pathologists can meet until enough have learned the method, and thus cause it to drop into disrepute because of errors in diagnosis. It was only after years of persistent effort of Dr. Papanicolaou that the technic was mastered and accepted by the pathologist and surgeon as accurate and reliable.

SUMMARY

Lesions of the cervix are frequently encountered. They should be treated, repaired or removed without delay.

Preinvasive cancer occurs during the reproductive period. This is the stage in which practically all cases are curable.

The vaginal smear method of Papanicolaou is reliable for diagnosing cancer of the uterus in the preinvasive or early stage.

REFERENCES

1. Kennedy, J. W.: Prophylaxis Against Cervical Malignancy, Virginia M. Monthly 73:51-52 (Feb.) 1946.
2. Pund, E. R., and Auerbach, S. H.: Preinvasive Carcinoma of the Cervix Uteri, J. A. M. A. 131:960-963 (July 20) 1946.
3. Taylor, H. C., Jr., and Guyer, H. B.: A Seven-Year History in Early Cervical Cancer, Am. J. Obst. 52:451-455 (Sept.) 1946.
4. Papanicolaou, G. N., and Traut, H. F.: Cancer of the Uterus; Vaginal Smear in Its Diagnosis, California & West. Med. 59:121-122 (Aug.) 1943.
5. Meigs, J. V.: The Early Diagnosis of Carcinoma of the Uterus, Tr. & Studies Coll. Physicians, Philadelphia 13:73-77 (June) 1945.
6. Ayre, J. E.: Vaginal and Cervical Cytology in Uterine Cancer Diagnosis, Am. J. Obst. 51:743-750 (June) 1946.
7. Papanicolaou, G. N.: Diagnostic Value of Exfoliated Cells from Cancerous Tissues, J. A. M. A. 131:372-378 (June 1) 1946.

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Medical Management of Essential Hypertension

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Of late, the medical literature is replete with discussions of the surgical treatment of hypertension. Attempts have been made to delineate the indications for such surgery, and in certain cases, surgery offers the only hope for survival. In a general way, however, contraindications are clearer than indications. There is a growing resistance to surgery. Except in malignant hypertension, many physicians are loath to advise radical treatment. Unfortunately, in many cases studied for years the patient does not attain the benefits promised, and the damage of the hypertension continues and progresses despite relief from symptoms.

Whether anything new can be added to the present day therapy of hypertension by medical means is questionable. Suffice it, therefore, for the present work to review briefly a practical method for handling cases of hypertension. There will be no attempt to discuss such therapeutic measures as pituitary extracts, radiation therapy, tetraethyl ammonium halogens and dibenzyl beta chlorethyl amine. These approaches may eventually prove to be the boon of medical therapy, especially some pituitary or adrenal extract. There is, however, so much research yet to be done in these fields that long discussion at this time would be fruitless.

In the practical management of hypertension, the first step is an adequate history and physical examination. Though the major proportion of hypertensive cases is in the essential and arteriosclerotic groups, there are occasional cases that fit into other categories, and the management of these rarer cases depends on their exact nature. Thus, it would be of little avail to treat an aortic insufficiency with hypertension as an essential hypertension. If the rare condition of pheochromocytoma is discovered, the patient can be cured by removal of such a tumor. The hypertension of thyrotoxicosis responds to thiouracil or surgery. No attempt is here made to enumerate all the causes of hypertension, but the few mentioned serve as an indication, first, of the fact that there are other forms of hypertension, second, that these other forms are comparatively rare, and third, that therapy depends on the specific type of hypertension present.

Assuming, then, that the history and examination fail to reveal any other cause and the diagnosis is essential hypertension, what is to be done for the patient? On this subject, textbooks have been written; so only sketchy remarks will here be considered. When the treatments for a disease are legion, there is no single satisfactory method of handling that disease. The present discussion will be divided into three major sections, mental factors, the use of drugs, and diet. If any points are mentioned which will make it easier for the practicing physician to handle his average case,

Presented before the Staff of St. Francis Hospital, Miami Beach, Oct. 27, 1947.

the purpose of this paper will have been accomplished.

MENTAL FACTORS

Mental factors are of great importance in essential hypertension. First, it is worthy of note that many patients whose condition has previously been diagnosed as hypertensive will come to the physician expressing great concern about the actual level of the blood pressure. Should such a person be told his pressure? Here, as throughout the remainder of this paper, it will be noted that no positive generalizations can be made. Each patient is an individual unto himself, and no two people respond in the same way. It is wise for the physician who sees a hypertensive person for the first time not to tell that patient more than is absolutely extracted from him. It is much more prudent for him to attempt to ascertain the basic personality of such a patient, so that he may be better able to guide him with the proper type and amount of information for that individual patient.

Thus there are some patients who have been told their systolic and diastolic levels with benefit. They have been able to use such levels as guides to the degree of activity and aggravation they permit themselves. They are intelligent and seem reasonable. There is, however, a hidden danger, for the bold individual who states he does not really care about what his level is, that it really does not worry him, is frequently engaging in braggadocio as a subterfuge for his true worry in this regard. It is therefore permissible for the physician to allow himself a white lie and tell the patient, should he insist on having a figure for his tension levels, that his pressure is considerably lower than it actually is. On the other hand, this action is also fraught with some undesirable features, notably the fact that some patients, being told they have a level that is normal or near normal, will assume a false sense of security. It may then be difficult for the physician to enforce any type of restricted regime he may desire.

What then, should the physician do? After ascertaining the individual patient's lability as well as possible, I have usually established a level for that patient. On subsequent visits, especially if there is improvement, such a patient is buoyed by the knowledge that the pressure has fallen. It is frequently wise to establish a goal, at which you explain that it will be satisfactory to maintain the patient, in relative safety. It is not unwise to establish this level a little higher than anticipated, so that if the pressure fails to fall to the desired level, you will have at least reached the level mentioned to the patient. And if the pressure reaches the anticipated level, the patient will acquire greater mental uplift from the knowledge that his pressure actually went lower than expected.

Secondly, it is essential to ascertain any particular worry or aggravation that may be annoying an individual patient. This is not an easy undertaking and may require many sessions before the true facts can be elicited. Some trivial condition or circumstance may be responsible for untold grief for one who is a sensitive person. The aggravating fact may be so minor that the physician neglects to give any cognizance to the matter at all. Here the internist is treading heavily on the soil of the psychiatrist. It is known that much in internal medicine is subject to influences in the psychic sphere. In a consideration of hypertension, it is, however, better for the patient if he is kept under the supervision of the internist rather than the psychiatrist. At the present time, there is still a great cloud, an embarrassed feeling, an unconscious resentment of the average person against psychiatric care. Furthermore, the well trained internist is as capable of giving good medical care to the hypertensive patient as is the psychiatrist. If the internist feels that he cannot reach the problem of the individual patient, then it behooves him, by whatever subterfuge may be required, to enlist the assistance of the psychiatrist at least to the point of delving into psychic cause of upset.

Thirdly, a most important consideration in the treatment of the hypertensive patient from the emotional point of view is the doctor-patient relationship. This is a matter of importance in all medicine, but in the treatment of hypertension it is particularly significant. There is the patient who walks into the doctor's office, and the doctor has such an effect on him that the blood pressure immediately rises to undue heights. In the Army, it was found advisable, in checking suspected hypertensive persons, to have the blood pressure checked repeatedly by the same trained orderly or nurse, rather than by the doctor himself. Unsuspected pronounced differences were observed when the physician would occasionally check a patient. If the physician finds that his patient bears some resentment against him—a resentment

the patient may not consciously know—it would be far wiser to send such a patient to a physician with whom he would have greater rapport. On the other hand, after taking an initial blood pressure reading in a particular case, the physician may find on subsequent visits that the pressure has dropped materially with little if any medication. This is an indication of confidence of the patient in the physician.

Finally, emphasis is laid on the necessity for treating each patient as an individual. All rules and generalizations are not hard and fast, and what may be just the wrong thing for one patient may be exactly correct for the next. One patient needs a great deal of rest, and the next requires constant work or a full program of activity, be it mental or physical, to keep his mind from his condition. It is not good policy to treat all patients in an identical manner, for sooner or later they compare notes. If they find that all receive exactly the same medications and instructions, they are hurt; their identity has been dealt a severe blow.

When a patient insists on detailed information as to blood pressure level, and when it is deemed advisable to be specific with such a patient, it is often wise to exaggerate the truth a bit. Some people will ask what the dangerous level is. To this query the true reply is that there is no fixed point below which a stroke is not going to occur, and above which its likelihood is greater. As a working rule of thumb, however, I frequently tell patients that a level under 200 systolic is reasonably safe. This is comforting if the blood pressure of the patient under consideration is in the neighborhood of 190. I believe that a patient usually requires active medication when the pressure reaches this level or beyond. At the same time, it is explained that cerebral and cardiac accidents may occur with the pressure below 200 and may not occur with it above this level, but from a safety and average standpoint, it is better to keep check on this level. It is also indicated that a level of 180 or less is safe enough to maintain in a patient continuously. If a patient has a blood pressure on first or second examination of 200 or 210, it may be expected that with minimal therapy that level will drop to 180 or less. Then, should the pressure actually fall to 170 or 160, the patient is greatly elated and has renewed confidence in his own vascular tree.

Many patients have heard or read about the wonderful results being obtained by surgery in hypertension. They present the problem to the physician for his advice and guidance. Many, indeed most patients with hypertension are beyond the age limits advised for such surgery, and this therapeutic procedure is immediately eliminated. In this major group alone, therefore, the need for medical treatment still remains of paramount importance. This must be explained explicitly and in great detail to the inquiring patient, for though he has probably already decided not to undergo so formidable a procedure, he likes to have such a procedure held in abeyance for him should his condition ever warrant such drastic treatment.

DRUGS

It is not the intent of this report to discuss in detail the myriad of specific and nonspecific medications that have at one time or another been prescribed. White[1] has an interesting array listed in his masterpiece on heart disease, and I refer you to this for a complete discussion of this point. Drug therapy for hypertension can best be divided into two major groups, the sedatives and "specifics." Among the sedatives, there is a host from which to choose. Nearly all are barbiturates, and there may be occasion when it is advisable to change from one to the other. Some patients require a constant succession of medication to get continued results. Also, if there is fear of addiction, it might be advisable to make such changes as are essential to prevent this occurrence. The use of bromides and chloral or paraldehyde might be considered, but prolonged use of bromides is not without danger. As a general rule, for the sedative requirements of hypertension, I constantly revert to phenobarbital, usually in small doses, either ¼ or ½ grain, from one to four times a day. Ordinarily, at the inception of treatment, this drug is given in moderate doses, but shortly afterwards, it is reduced to minimum effective doses.

As for specific drugs, there are none. The xanthines, papaverine, nitroglycerin and other vasodilators have been tested time and again, and all reports to date leave much to be desired as to positive evidence of the efficacy of any. The general trend today is toward thiocyanates. This is not a new method of treatment, and even many years ago was found to be helpful, but the dangers attendant upon its use for a long time precluded it from the average physician's armamentarium. Today, however, there is a small kit available for

determining the blood level of thiocyanate, and a level up to 12 mg. per hundred cubic centimeters is safe enough to warrant the return of this drug to its place in active treatment. I have not been entirely satisfied with this method of determining blood levels and get more accurate determination by means of the electric photometer. Should such an instrument not be readily available, however, the quick simple procedure of using the small kit is adequate enough to permit the use of thiocyanate in most cases. The drug is not universally successful, nor can it be used in every case, because even in small dosage with a blood level below 12 mg., there may be signs of sensitivity, such as drug eruption and gastrointestinal disturbance. There may be mental symptoms or swelling of the thyroid.

There is a variety of methods of giving the drug. A simple one is to prescribe it in 3 grain tablets of potassium thiocyanate. This may be given in doses of three such tablets a day for three days. It is then wise to determine the blood level and guide further dosage by the result of this determination, as well as by the effect produced. Thus, a level of 12 mg. is a maximum safe level. There are, however, many patients who get the desired results, such as lowering of the blood pressure and relief of headache, at a level of only 6 mg. It goes without saying that the dose need only be great enough to produce the desired effects, and no greater than the maximal level. In case signs of toxicity develop, the dosage may be decreased or stopped depending on the nature and degree of these signs. It is best to determine the blood level of the thiocyanate every five to seven days until a maintenance dosage is worked out, and then at increasing intervals as conditions permit. As has been mentioned, the effectiveness of the drug is not necessarily proportional to the concentration in the blood. There will be a group of patients who, after a month or two of therapy with this drug at a maximal level of concentration, will show neither subjective nor objective improvement. Continued administration is useless. Nevertheless, it might be worth a trial in an occasional case to allow a few months to elapse and then try the drug again.

DIET

Recently the role of diet in hypertension has gained considerable prominence. The diet of Schemm, the acid-ash diet, was originally designed for use in congestive heart failure. The rice-fruit diet of Kempner[2a] was described for hypertension, and in successive publications its effectiveness was shown to be astonishingly great.[2b] Since that time patients have flocked to Duke University for "the treatment." Many of your patients and mine have gone there. Whether this diet is effective or not is now subject to considerable question. In either event, the usefulness of a diet of such restricted variety is limited because it imposes undue hardships on the patient. In the experience of each of us who has used this diet, there has been a patient who initially was elated with the rice-fruit diet because of the intense liking for this food. Before a week of three meals a day of rice has passed, this patient can, however, no longer tolerate such an exclusive diet. According to the method of Kempner, a patient is kept on this restricted diet for a few months, until he shows improvement sufficient to warrant extension. Most of the patients I have attempted to treat according to this regime have balked and refused to remain on the diet. Some modification was therefore indicated.

In 1945, Grollman and his co-workers[3] worked out a diet based on actual sodium levels. In fact, it has been reasoned by some workers that the benefits that accrue from the rice-fruit diet are due to its low sodium content. Grollman and his co-workers[3] found that this diet was effective in animals. They then tested a group of 6 patients on this new regime. Three were listed as being markedly improved, two somewhat better, and one was not helped. Other workers in this field are divided as to whether the diet is effective or not. As yet, no large series of cases has been thoroughly studied and reported, and all opinions are purely impressions rather than scientifically controlled facts. Yet it seems advisable to utilize a diet of this type for several reasons. A good, palatable, adequate diet can be prepared. While there is restriction, there is sufficient variety to permit a patient to remain comfortably on the diet permanently.

The idea of a salt-free or low sodium diet is basically not new. Comparatively recently it has been determined that it is rather the sodium ion than sodium chloride that must be restricted. As for dietary preparation, it was a difficult procedure to determine sodium content of food until very recently. The older chemical methods of analysis are long drawn out procedures, frequently taking the better part of a day for a single determination. In addition, these

methods are loaded with pitfalls, and the results are unreliable. Determination of the small quantities present is next to impossible by these methods. About a year ago, the flame photometer improved the technic for the study of sodium and potassium. By this method it is possible to make speedy and accurate determinations when minute amounts of sodium are present. Within the past month or two, a new development, the Beckman spectrophotometer, has appeared on the market, and this instrument may still further improve the accuracy and ease with which estimations may be made. Also, within this time, it was shown that accurate quantitative sodium analysis on very small quantities of sodium could be performed by polarography.

Though salt-free diets have been utilized for many years, it was thought that reduction to an intake of 1 Gm. a day should be adequate for great improvement. This regimen proved to be frequently disappointing. Only recently has it been shown that such restriction is likely to be beneficial only when the reduction is to less than half a gram per day. This is a very small amount of salt daily and in hot weather may occasionally result in muscle cramps and gastrointestinal upsets. If a patient is maintained on such a low sodium diet for any prolonged period, it may occasionally be necessary to give him added salt to relieve the symptoms of depletion. If these symptoms are not too acute or severe, the salt can be given as common table salt added to the diet, usually being given in an amount of a quarter to half a teaspoonful. Such a dose may again last a patient for a month or more.

As for the actual constituents of such a diet, these can be found in Grollman's article,[3] or can be prepared by a dietitian from a master list of sodium contents of the various foods. The diet consists of fruits, vegetables, cereals and small allowances of meat. Grollman's diet is drawn up for a week's period, allowing three meals a day. The basic component, for the purpose of providing adequate caloric intake, adequate vitamins and sufficient protein, is milk, recommended to be taken in the amount of a quart and a half a day. Since whole milk contains 40 to 50 mg. of sodium per hundred cubic centimeters of milk, 1,400 cc. of milk contains 560 to 700 mg. of sodium, or more than the 500 mg. permitted. To circumvent this difficulty, dialyzed milk is given. This is prepared as a powdered milk. When reconstituted with water, it contains about 1 mg. of sodium per hundred cubic centimeters of milk. Approximately 4 quarts of milk can be reconstituted from a pound of powder, and the cost to the patient is in the neighborhood of 75 cents per quart. Another important factor in the diet is bread. Many people use bread as their basic food. Salt-free bread has been prepared. For the past two years this bread could be purchased in Boston, and one of the chains there is now handling this item. Recently, other bakeries in other cities have begun to market salt-free, soda-free bread, and recipes are available for home preparation of this product.

Finally, many people, especially those accustomed to large quantities of salt, find the palatability of their food impaired by the lack of salt. For these, many salt substitutes have been prepared. Eka sol has been used widely, as well as potassium chloride either alone or in combination with other nonsodium salts. Recently, neocurtasal has appeared on the market, and most patients favor this product. The patient is instructed not to use this salt in cooking, but to season his food to taste after cooking.

After having brought the hypertensive patient to this stage in his care, the question arises when the patient should be seen again, and how often such visits should occur. Here again there can be no generalization. Each individual must be considered individually. First, does the physician believe the patient is in imminent or relatively imminent danger because of the height of the blood pressure, because of a sudden rise or a sudden fall in blood pressure? Second, is it deemed feasible to carry out complete laboratory studies on the patient? Third, is it a routine check-up, and is the patient's condition good? Fourth, what is the emotional makeup of the individual? Does he gain comfort and confidence by the visit to the physician? By previous knowledge of the patient, how frequently does he require such reassurance? Must his life, at least as regards his physical health, have to be prescribed for him? Thus it is apparent that in one case it may be incumbent upon the physician to order a patient to return in three days' time, or a week, or a month, and in the case of another patient to state that his condition is favorable, and if he will follow the simple rules prescribed, it will not be necessary for him to return for any scheduled visit. If the proper physician-patient relationship has been established, and if the patient has confidence in the physician, the physi-

cian need not worry about the patient's return, for when such a patient again feels the need for visiting a physician he will return to his doctor.

SUMMARY

It is pointed out that though surgery has stolen the stage as the sensation of the season in the treatment of hypertension, there is still ample room for medical management in a great many cases. The importance of history and physical examination are briefly mentioned. No attempt is made to discuss the subject of management in great detail, and most of the controversial subjects have been avoided. The use of such drugs as tetraethyl ammonium halogens, which have thus far been disappointing in hypertension, and dibenzyl beta chlorethyl amine, is left for future discussion when more information is available. The main considerations presented are the mental factors concerned in the treatment of hypertensive patients, emphasizing the possible methods of discussing blood pressure levels, the necessity for search for the aggravating features in any particular case, and the creation of proper doctor-patient relationship; drug therapy, with pointed comment on the use of the barbiturate sedatives and thiocyanates; and diet, with an attempt to sketch easy methods for obtaining desired results. The use of a modified Grollman diet, one constructed to yield 500 mg. or less of sodium daily, with the elaboration of a soda-free bread and milk with a low sodium content is encouraged. It is realized that such a diet may have no specific action in reducing blood pressure, as may be proved scientifically in controlled studies in the future. If, however, for no other reason than to place a patient on a set regime and to emphasize the psychogenic effects, this diet is suggested, for it has proved of benefit in my experience.

REFERENCES

1. White, P. D.: Heart Disease, ed. 3, The Macmillan Company, 1944, p. 446.
2. (a) Kempner, W.: Treatment of Kidney Disease and Hypertensive Vascular Disease with Rice Diet, North Carolina M. J. 5:125-133 (April) 1944; 5:273-274 (July) 1944; (b) Compensation of Renal Metabolic Dysfunction; Treatment of Kidney Disease and Hypertensive Vascular Disease with Rice Diet, ibid. 6:61 (Feb.) 1945; 6:117 (March) 1945.
3. Grollman, A.; Harrison, T. R.; Mason, M. F. (Ph.D.); Baxter, J.; Crampton, J., and Reichsman, F.: Sodium Resection in Diet for Hypertension, J. A. M. A. 129:533-537 (Oct. 20) 1945.

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ABSTRACTS OF MEDICAL ARTICLES

PROBLEMS IN THE SURGICAL MANAGEMENT OF HIP FRACTURES. By Robert C. Lonergan, M.D. South. M. J. 40:605-608 (July) 1947.

The author doubts that there is a greater percentage of successful results in the management of hip fractures today than there was early in the century. He concurs in the conservative estimate of Key and Conwell, who state that the mortality among patients with femoral neck fractures ranges from 10 to 20 per cent, that union may be expected in from 40 to 60 per cent of patients who do not die, and that even with union there is a considerable disability from late absorption of the head.

He believes that internal fixation of fractures of the femoral neck has slightly increased the percentage of healing and has added a tremendous improvement in the methods of treatment of the patient, thereby reducing the period of disability and probably reducing the rate of mortality. He points out, however, that the fixed problems peculiar to this type of fracture still remain. In certain types of hip fracture which are unfavorable for healing, the author reluctantly concludes that he would prefer to do the reconstructive procedure immediately, eliminating the period of internal fixation. The trochanter fracture can, for the most part, be simply treated, he observes, with Russell traction or a cast or the Roger Anderson well-leg traction splint.

The mechanical problems are often augmented by other factors, the first consideration always being the general condition of the patient. Fracture in the region of this most important weight-bearing joint in the body, it is noted, occurs as a rule in elderly persons and in women six times more frequently than in men; too, the senile patient often has in addition to fragile bones, decreased elasticity and some osteoporosis, the additional complication of cardiovascular and renal changes.

ANESTHETIC ACCIDENTS. By Ralph S. Sappenfield, M.D., and John Adriani, M.D. South. M. J. 40:455-461 (June) 1947.

The commonest and most obvious hazards of anesthesia, especially in relation to deaths resulting from anesthetization, or "anesthetic accidents," are presented. Most anesthetic deaths are preventable, it is pointed out, when certain significant prodromal signs are recognized. Failure to observe and heed warning signs is not necessarily due to thoughtlessness or neglect, but rather to a lack of knowledge of the science of anesthesiology, the authors indicate. Unless one who administers anesthetics has knowledge of human physiology and of the pharmacology of anesthetic drugs and is familiar with disease, and how it is affected by the drugs, surgery and other factors, he is termed merely a technician and not an anesthesiologist.

It is pointed out that many anesthetic accidents from inhalation anesthesia occur during the induction period, while approximately half the anesthetic deaths occur during the immediate postanesthetic period. Anesthetic accidents also occur during intravenous and spinal anesthetization. Asphyxia from one cause or another is listed as the most frequent cause of death from inhalation anesthesia; it also is noted as the greatest hazard of intravenous anesthesia. Death from spinal anesthesia in most cases is caused either by respiratory paralysis or circulatory failure, it is observed. The various hazards of anesthesia are illustrated in the reports of 7 surgical cases.

PRIMARY HYPERTROPHY AND HYPERPLASIA OF THE PARATHYROID GLANDS ASSOCIATED WITH DUODENAL ULCER, REPORT OF AN ADDITIONAL CASE, WITH SPECIAL REFERENCE TO METABOLIC, GASTROINTESTINAL AND VASCULAR MANIFESTATIONS. By H. Milton Rogers, M.D., F. Raymond Keating, Jr., M.D., Carl G. Morlock, M.D., and Nelson W. Barker, M.D. Arch. Int. Med. 79:307-321 (March) 1947.

These authors report a case in which pronounced clear cell hyperplasia of the parathyroid glands and primary hyperparathyroidism were associated with healed duodenal ulcer. Since this case represents the third instance in which the association of probable hyperparathyroidism and peptic ulcer was observed at necropsy during one year at the Mayo Clinic, it is suggested that this association may not be one of chance.

The weight of the parathyroid glands, 47.56 Gm., is the greatest recorded in instances of primary hypertrophy and hyperplasia. Peripheral gangrene was a terminal event and death resulted from renal insufficiency secondary to nephrocalcinosis. Also disclosed at necropsy were pancreatic lithiasis, mild osteitis fibrosa cystica, and an unusual type of necrosis of arterial walls, with intimal calcification, which apparently was responsible for the gangrene of the peripheral parts. Gastrointestinal symptoms were presumed during life to be due entirely to ulcer, but appeared in retrospect to have been manifestations of severe hyperparathyroidism.

AN ATTEMPT TO FORESTALL ACUTE CORONARY THROMBOSIS. By E. Sterling Nichol, M.D., and David W. Fassett, M.D. South M. J. 40:631-637 (August) 1947.

The authors find that acute coronary thrombosis can be treated with dicumarol with very satisfactory results. Five patients with multiple attacks of coronary thrombosis were given dicumarol for a period of six to thirty-two months in an attempt to forestall additional acute attacks. Although one patient suffered a fatal attack, he was not properly dicumarolized at the onset of the terminal attack due to his own laxity; autopsy studies revealed no ill effect from long-continued use of dicumarol, and extensive myocardial fibrosis and ventricular aneurysm were found, as relics of his earlier attacks. An unexplained decrease in anginal pain was noted by all of these patients while they were under treatment except in the instance of the terminal attack suffered by the one patient.

While no conclusion as to the value of dicumarol in the prevention of acute coronary occlusion can be drawn from the experiences of this small group of patients, the authors believe that the results of therapy with this drug justify further clinical trial. They conclude that the procedure is rational and is safe if carefully performed prothrombin time determinations are made at frequent intervals. They urge that no physician use dicumarol unless he has a very competent laboratory available for the prothrombin time studies and unless he is willing to have the tests made frequently.

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NEWLY ELECTED OFFICERS

An able corps of officers was elected at the closing session of the Annual Meeting of the Association in St. Augustine on April 14, and they were inducted into office with Dr. Joseph S. Stewart, who succeeded Dr. William C. Thomas as president. Assuming office with President Stewart were: Dr. Walter C. Payne, Pensacola, President-elect; Dr. Herbert E. White, St. Augustine, First Vice President; Dr. Horace A. Day, Orlando, Second Vice President; Dr. Reddin Britt, St. Augustine, Third Vice President; Dr. Robert B. McIver, Jacksonville, Secretary-Treasurer, and Dr. Shaler Richardson, Jacksonville, Editor of The Journal.

Among these leaders for the ensuing year, two were continued in office. Dr. McIver enters the fifth consecutive year of service as Secretary-Treasurer. Dr. Richardson begins his twenty-third year as Editor of The Journal, an office which he has held continuously since 1925 except for a period of three years when he served as president-elect in 1944 and 1945 and as president in 1946.

President Stewart has completed the committee assignments. They are published on page 664 of this issue of The Journal. The progress of the Association in the months ahead rests with the new officers and those who have accepted the responsibility of serving on a committee.

STATESMANSHIP IN MEDICAL CIRCLES

The key to Florida's future, said Dr. J. Hillis Miller in his inaugural address as president of the University of Florida, is "statesmanship in education and in governmental circles." The term statesman denotes one versed in the principles and art of government and carries with it the connotation of broad-minded and far seeing sagacity in affairs of state. If the citizens of Florida would have maximum attainment in government and education, commensurate with their expenditures, it follows that they must select statesmanlike leaders whose own lives reflect the correct principles they must know how to apply effectively in formulating the policies and directing the functions of government.

The analogy is as clear for medicine as for education and government. As never before, the times call for leaders of organized medicine within this state and throughout the nation who have attained the stature of statesmen, who display the statesmanlike qualities of broad-minded and far seeing sagacity in the affairs of medicine. These leaders are today called upon to save for the profession its coveted freedom, to present for it a united front against the menacing encroachments of a changing social order that would wreck its future, and boldly to lead it forward along the road of progress for the benefit of every citizen. True enough, the state society and the national organization as well are largely what their

leaders make them over the years. On the other hand, the leaders are the creatures of the membership, elected by its delegated representatives to serve in places of high responsibility on behalf of all the members.

Have you ever asked yourself "What is a state medical society—my own, for example?" Is it a scientific and educational organization as we would have the Bureau of Internal Revenue believe? Is it a protective guild of skilled craftsmen? Is it a polite device for spreading propaganda? Is it a social club through which one may extend his acquaintance and prestige? Is it an institution for public service? It is, of course, a composite of all of these, with the emphasis upon and the success of the various aspects depending basically upon the membership and immediately upon the leadership.

Musing upon these questions recently, Dr. Creighton Barker, the executive secretary of the Connecticut State Medical Society, commented pointedly, "It is complicated, isn't it, when you stop to think of it? And it is further complicated when it is acknowledged that a society—any society—is people. It is people that confuse it most and the people who make up a medical society are something special, all educated, mostly intelligent, quaintly conceited, strict individualists usually with a common interest and peculiarly unselfish. Mix them all up and add a few honest and some bogus idealists and a spatter of the unscrupulous and you have a medical society, an organization the like of which is hard to find."

Where do you put the emphasis? What is your state medical society to you? As the corps of officers chosen last month at St. Augustine endeavors to serve you throughout the ensuing year, show your interest in the society and your confidence in them by standing back of them and lending your aid. Leave no stone unturned to render full cooperation as they strive to give to the Association and to the citizenry of Florida for their present and future welfare statesmanship in medical circles.

BRITAIN'S EXPERIMENT IN SOCIALIZED MEDICINE

Inasmuch as our government is based on many fundamental concepts which originated in England, it is of particular interest to examine that country's widespread nationalization program and to review its experiment in socialized medicine.

A bill to provide universal free medical service, which is part of the Labor government's National Health Act of 1946, is to become law on July 5, 1948. Recently British physicians were asked to indicate by vote whether they would enter the state program. Defying the Labor government and its majority in the Parliament, and supporting a previous decision of the British Medical Association, 86 per cent of Britain's medical practitioners, specialists and consultants, in a nationwide plebiscite whose results were announced February 16, voted not to work under the universal free medical service scheme. That vote means that the government would have a maximum of 4,500 general practitioners, consultants and specialists to operate a health service designed for 47,000,000 people. The more than 25,000 physicians who are qualified, but who would not participate, are challenging Minister of Health Aneurin Bevan to make his scheme work.

It is not the intention of Britain's physicians to go on strike and refuse medical service. They would continue to treat patients and render bills for their services. When payment was not possible, attention would be given without charge.

The workability of the socialized health scheme thus seems to have been placed in jeopardy, but there is no indication that the government intends to alter the Health Service Act materially or postpone its effective date. The Socialist Medical Association, made up of pro-Labor doctors, has predicted that most general practitioners will discover before July 5 that they can best serve the sick by joining the service on the "generous terms" offered.

In his attack on the British Medical Association, Minister of Health Bevan said in part: "The leaders of the British Medical Association are a small body of raucous-voiced, politically-poisoned people who have completely misrepresented the medical profession as they have

misrepresented the National Health Service Act." He called the action of this association a "squalid, political conspiracy" and accused his opposition of "organizing to sabotage an Act of Parliament."

In order to put through its program, the government will have to resort to more and more force while ill feeling and controversy will increase, all of which will, perhaps, hasten the eventual loss of power of the Labor government. In the meantime, while this country gropes for a plan to assure adequate medical care for all, the British method would appear to be one to avoid.

THE CHEMIST AND THE PHYSICIAN
ANTIBIOTICS

The tremendous progress since 1941 in departments of science other than medicine, particularly chemistry, has contributed heavily to advances made in the medical sciences. The contribution of the chemist to clinical medicine has been especially to the fore in the field of antibiotics. The phenomenon of antibiosis has long been known, and it has received much study for three quarters of a century, but a combination of good biochemistry with other forms of biologic investigation has been applied to the problem of antibiotics only since 1939.

So far the antibiotic of greatest clinical value is penicillin. When its low toxicity and other desirable properties were sufficiently demonstrated to give the substance proper recognition in the class of systemic chemotherapeutic agents, there was loosed a flood of inquiry that subjected it to elaborate investigation. The great skill with which the studies were carried out in the laboratory, from the chemical as well as the biologic point of view, yielded an extensive knowledge of the behavior in the animal body not only of "penicillin," but of some of the individual penicillins now becoming recognized in increasing numbers. The remarkable transformation from production of the drug on a laboratory scale in individual vessels holding a few hundred cubic centimeters to enormous output in gigantic plants is a tribute to the chemists, together with the biologists, trained technicians and engineers, but for whose activities the work of the laboratories could not possibly have been translated into clinical terms.

Surveys of enormous numbers of organisms, fungi, actinomycetes and bacteria, have resulted in the isolation of a great number of antibacterial substances other than penicillin and streptomycin. They have been given clinical trial, and some have already met many of the requirements desirable for any antibiotic that is to be used as a systemic therapeutic agent. Dr. Howard Florey[1] of Oxford, England, who was awarded the Nobel Prize in 1945 for his work on penicillin, lists these requirements as: (1) It must have a powerful action against some bacteria. (2) It must be more active against some bacteria than against others. (3) It must possess little toxicity to the intact animal body, the individual cells or the kidneys, even when given in frequent doses for a considerable length of time. (4) It must be active in the presence of body fluids as well as in the test tube. (5) It must not be destroyed by tissue enzymes. (6) It should be stable. (7) It should not be too rapidly excreted by the kidneys. (8) It should not be capable of producing in infecting bacteria resistance to the chemotherapeutic drug itself. It happens that penicillin is not stable and leaves the body very quickly; too, bacteria eventually become resistant to streptomycin and, to a lesser degree, to penicillin.

That much of the good work in medicine is currently being done not by physicians but by chemists is necessarily true of the antibiotics. Dr. Florey predicts the discovery during the next few years of new drugs of this class which will in all probability find a place in medicine. The evidence is, however, that they will be few, as most of those so far investigated are very toxic to animal tissues or have other disadvantages. The extraction and examination of naturally occurring antibiotics is necessarily slow work. In many instances chemical extraction is difficult and laborious; cultural conditions often present difficulties, as do biologic examinations. Nevertheless, the steadily accumulating data promise within relatively few years at least a broad pattern of the types of substance which are produced by micro-organisms. Every study of the action of an antibiotic throws some light on the life processes of bacteria. The progress in this field serves to remind the practitioner of medicine that the employment of modern chemotherapeutic agents will more and more necessitate a good knowledge of bacteriology on his part. Whatever

happens, concludes Dr. Florey, those who are engaged in this work will be contributing to the sum total of knowledge, and if medicine benefits from it so much the better.

1. Florey, Howard: New Antibiotic Agents, J. A. M. A. 135:1047-1049 (Dec. 20) 1947.

THE HIDDEN TREASURES OF THE LATER YEARS

What if the average life span were a century? Since 1847 the average length of life has increased from 40 to 68 years, and this major attainment of modern science may be expanded by future research to lengthen man's life expectancy to a full century. Indeed, it has been said that were all available knowledge utilized, the average life span would approximate 100 years even now.

It is pleasant to contemplate the physician of today as a more effective public servant than ever before in the history of mankind and to realize that the remarkably effective weapons forged by medical science in the last quarter of a century have largely made him so. It is gratifying to reflect that as a people we enjoy better health, we are living longer, we find the mature and productive years increased in number, and we may, by cooperating with the medical profession in utilizing available information for the control of disease, delay the ravages of old age.

But what of these extra 27 years already added—are they full and happy ones, or have they shrunk in value like the dollar? The answer of one newspaper editor to this important question is thought-provoking:

> Yes, indeed, they are very much fuller. Crowded, in fact. Man, who in 1847 could crowd only 25 miles an hour into his life can now crowd 600. He can now have canned peas, lettuce, fresh strawberries and frozen rhubarb all the year round, whereas in 1847 he could have them only in season. He can have music wherever he goes, indeed it is all he can do to escape it. He can see movies day and night and listen to drama, opera, lectures and guessing contests while he is reading his paper or trying to talk. And as for knowing what's going on in the world, his ears are full of it, sometimes the day before it happens. The chances are that in 1847 he never heard it at all.
>
> It is truly astonishing how chockful these extra 27 years are of books, pills, calories, shoes, ulcers, gadgets, lawsuits, accidents, games, fun, new diseases and all imaginable excitements.—Providence Journal

Undoubtedly, the world moves on at an accelerated pace. It is probably true that no other group has a keener sense of social responsibility than has the medical profession, and certainly increasing longevity, especially in the kind of a world in which we must live today, is a matter with which it is deeply concerned. In the opinion of Dr. Edward L. Bortz, President of the American Medical Association, the human race is losing tremendously from the lack of utilization of the mature minds of individuals who grow into the later years of life. In speaking on the usefulness of geriatrics—the treatment of the diseases of old age—as a specialty, this medical leader observed: "It has been estimated that the emotional pattern of the human personality matures some time in the mid-thirties, that man's intellectual maturity is attained somewhere around 40 years of age, and that his spiritual being finds its greatest fruition, maturation and value as an individual and social unit in the later years of human existence. . . . Largely society has failed to utilize the hidden treasures of the later years.

Recent research indicates that although less than one third of persons chronically ill are over 65, the group of this age and over nevertheless constitutes two thirds of the chronically ill who need care outside the home. Planning for the aged must therefore be closely correlated with planning for the chronically ill, but by no means does age 65 necessarily bring with it disability. The Chicago-Cook County 1947 Health Survey revealed that of 200,000 persons over 65 years of age, 40 per cent were active and productive and only 8 per cent were chronically ill.

Fortunately, modern medicine is now in a position to keep a large percentage of those over 65 productive. Ten and one-half million people in the nation are within this age group. As legislators may well concern themselves with the group of voters 65 years of age and over who have doubled their numbers in the last twenty-five years, so physicians may well ponder the problems of oldsters, many of which are unrelated to chronic disease. The steady increase in the average life span of man should bring from relative obscurity the specialty of geriatrics so that it may help to make the lengthening life expectancy a gift of modern science truly to be coveted.

NEW DIAGNOSTIC PROBLEMS

Repeated warnings of the danger of the occurrence in the United States of tropical disease have recently been published in medical literature.[1] With the return of many hundreds of thousands of Americans from war areas where tropical disease and diseases foreign to this country are endemic and with postwar civilian and military travel greatly expanded, exotic diseases now present an immediate problem to the practicing physician. On his diagnostic ability rest the proper treatment and the cure of the patient and also the primary protection of the community.

Malaria, bacillary dysentery, amebiasis, filariasis and intestinal protozoan infestations will probably be most frequently encountered and will occur in areas where they were formerly observed rarely or not at all. In scattered numbers, such other diseases as kala-azar, African and South American trypanosomiasis, cutaneous leishmaniasis, schistosomiasis, yaws and pinta will doubtless occur. The prevalence of leprosy in areas where troops were stationed makes it almost inevitable that a few cases will appear after long incubation periods.

Many of these diseases will have reached a mild intermediate or chronic stage, thereby making the problem of differential diagnosis more difficult. Symptoms are frequently vague. They may be merely fatigue, recurrent headache, loss in weight, nervousness, palpitation and uneasiness with mild or moderate gastro-intestinal distress. Too, many psychoneurotic patients experience the same symptoms. Differential diagnosis, therefore, intrigues interest and challenges the diagnostic acumen of the physician.

It is of particular interest in Florida that a variety of hookworm hardier than the American hookworm may migrate from the Pacific Islands and become established in the South. Investigators[2] state that of servicemen returning from the Pacific one in fifteen has been reported infected with a species of hookworm which presents a greater public health problem than the shorter, more slender species now established in the Southern states. Not only is it more harmful to its host, but it resists treatment more stubbornly, and its larvae can survive under less favorable climatic conditions.

Although hookworm infection results in gastro-intestinal disturbances, abdominal pain, a fever that comes and goes, progressive anemia, pallor and emaciation, the majority of the servicemen whose infections were discovered showed no conspicuous symptoms. Doubtless many similar cases were untreated. Obviously then, ex-servicemen returning to the South with infections undetected and untreated may be unsuspecting hookworm carriers through whom soil infections in hot humid climates may be established if their hygienic habits are not of the best. Here is another aspect of increasingly difficult diagnostic problems.

1. Exotic Diseases, J. A. M. A. 136:111-112 (Jan. 10) 1948.
2. Loughlin, E. H., and Stoll, N. R.: Hookworm Infections in American Servicemen, J. A. M. A. 136:157-161 (Jan. 17) 1948.

REPORT OF DELEGATES TO A. M. A. CONVENTION

The Interim Session of the American Medical Association at Cleveland January 5 to 8, 1948 included the meeting of the House of Delegates and a scientific program for general practitioners. The total registration was well over three thousand. The House of Delegates met on January 5 and 6, and the scientific program was presented on January 7 and 8.

The first order of business of the House following the seating of the delegates was to select the recipient for the General Practitioner Award. One hundred and eighty nominations were made by interested persons, cities, clubs and various other groups. From this list the Board of Trustees presented to the House the names of three physicians from which to select the one who would receive the award. These three were Dr. W. L. Pressly, aged 60, Due West, S. C., Dr. Jacob T. Oliphant, aged 60, Farmersburg, Ind., and Dr. Archer C. Sudan, aged 56, Kremmling, Colo. Dr. Sudan was elected and was present the next day to receive the award and congratulations of the House and the officers of the Association.

Special study and consideration has been and is being given by the House of Delegates to such important problems as the supply of nurses, interns and residents, the relationship of the laboratory and x-ray to hospital insurance practice, the place of the hospital in medical care and the various plans that have been developed for extending medical care to the mass of people, particularly those in rural areas.

The Board of Trustees distributed to the members of the House a very complete written statement indicating that the American Medical Association is moving steadily forward in a systematic and organized manner to meet the needs of the American people for a wider distribution of a high quality of medical care.

Dr. E. L. Henderson, Chairman of the Board of Trustees, who headed a delegation of four from the American Medical Association chosen to attend the organization of the World Medical Association in Paris in September, reported the progress made at that meeting. Forty-eight nations were represented. The association was organized into a general assembly consisting of two delegates from each national medical association and a general council consisting of the president, president-elect, treasurer and ten elected members. The president is to come from the country in which the general assembly meets. The president is from France, the president-elect from Czechoslovakia, the treasurer from Switzerland and the council members from England, Sweden, France, Spain, Austria, India, China, Cuba, Canada and the United States.

Since the income from dues would be insufficient to make the organization effective, the delegates from the United States offered to provide $50,000 yearly for five years through voluntary subscription from industry, medical organizations and individual physicians to be spent under the auspices of a United States committee. Certain provisions had to be agreed to before the money would be available, the important one being that the headquarters and general secretariat would be located in North America. Headquarters will be in New York City. The German Medical Syndicate was not admitted to membership.

Both delegates from Florida were present at every meeting of the House and the senior delegates served on the reference committee on miscellaneous business.

The House voted to increase the annual dues from $8.00 to $12.00.

Respectfully submitted,
Homer L. Pearson, Jr.
Louis M. Orr, II

NIGHT SERVICE DEMAND

The American Medical Association calls on county medical societies to meet the public demand for emergency medical service at night.

"From many sections of the United States," says an editorial in a recent (March 6) issue of The Journal of The American Medical Association, "complaints have come lately that persons who have called physicians late at night have been unable to obtain attendance from either those whom they considered their family physicians or from specialists or, indeed, from any physician."

The American Medical Association says that large county medical societies or urban groups should maintain a physicians' telephone exchange which would take the responsibility for locating physicians if response is not made to the ringing of the telephone in the home or in the office.

The solution is simple and practical, requiring only a minimum of community organization. A number of county medical societies already maintain a physicians' telephone exchange where doctors' calls may be received and doctors located if their office or home telephones do not respond. Such an exchange can be utilized, as at night or on holidays, simply by furnishing the exchange with a list of physicians who are able and willing to make night calls. Such physicians would probably include the younger general practitioners, newcomers to the community, and others in general practice. If such a roster were available, and its availability widely publicized, night calls for medical service would soon gravitate to this center and the patient would be assured the services of a physician.

Under such a system the necessity for calling many doctors would be eliminated. Two calls at most would be necessary. Where there is no physicians' telephone service, it might be possible to have the hospitals cooperate by handling such night calls. The Medical Society of the District of Columbia and the Milwaukee County Medical Society have found such a plan practical, as have a number of other societies.

By this simple and practical expedient, which is doubtless in effect in modified form in a number of communities, the sick can be served and the medical profession can redeem its pledge of unselfish public service. It is highly important that where such arrangements exist they be brought to the attention of the lay people in the

community through appropriate public channels, not once but repeatedly, to keep the shifting populations well informed.

Few problems in the field of medical service have aroused so much public discussion. Whether resentment against physicians is justified or not, it does harm. The solution for this problem is so eminently simple and would reflect so favorably upon physician-patient relationships that medical societies everywhere are urged to give it serious consideration immediately.

MEDICAL PRACTICE ACT

During the year 1947 ten arrests were made for violations of the Medical Practice Act, according to the annual report of Mr. M. H. Doss, director of the State Bureau of Narcotics of the Florida State Board of Health. Aggregate sentences imposed by criminal courts were one year and six months, while aggregate fines amounted to $1,450. One case resulted in an acquittal and two were discharged by the courts; one injunction was obtained in circuit court. Ten violations were corrected without legal action.

The Bureau of Narcotics is charged with enforcement of all narcotic, medical and pharmacy laws of the state. The service rendered the citizens of Florida through the activity of this department of the State Board of Health is highly commendable.

NEW HANDBOOK OF NUTRITION

That the profession may anticipate a new edition of the "Handbook of Nutrition," now in course of preparation, is of particular interest at this time. The importance of the world food situation today properly focuses attention on the subject of nutrition. Too, the rapid advances in the profession's knowledge of nutrition and the recognized importance of food and nutritional considerations in wound healing, recovery periods and fluid replacements make the appearance of the new handbook especially timely.

The Council on Foods and Nutrition of the American Medical Association announces that there will be twenty-eight contributors to this book, all authorities in their respective fields, and their articles will appear from time to time in The Journal of the American Medical Association. The general titles of the book's four sections are Individual Nutrients, Nutritional Needs, Nutritional Deficiencies, and Foods and Their Nutritional Qualities.

APPOINTMENT OF COMMISSIONED OFFICERS IN THE MEDICAL CORPS AND DENTAL CORPS OF THE REGULAR NAVY

The statutory authority contained in Public Law 365—80th Congress, Title II (Army-Navy-Public Health Service Medical Officer Procurement Act of 1947) makes it possible now for civilian doctors to become commissioned officers in the regular Navy, provided they meet the professional and physical qualifications. This law is unique in that it does away with, for the first time, the age limitation of 32 years of age and permits doctors in civilian practice to enter the Navy and be commissioned with the rank up to and including Captain. The law considers all strata of the medical profession, internes, residents, reserves, former medical officers who have resigned, and present practicing physicians.

In order to make application a doctor must be a citizen of the United States and a graduate from a Class "A" medical school; he must have served at least one year's internship in an approved hospital. Candidates will then be judged on a number of qualifications such as being a member of a specialty board, teaching connections, the number of years of professional or scientific practice, hospital or laboratory connections and a statement of military service.

The allocation of rank to successful candidates will depend upon their academic age, professional standing and experience in the medical field. Successful candidates will then be integrated in line with medical officers of the regular Navy and assigned running mates accordingly. This means that they will be eligible for promotion along with their fellow officers of equal rank.

This law offers a fine opportunity for civilian doctors to make a career in the regular Navy and to enjoy its professional advantages as well as its retirement benefits. Doctors interested in such a career should write to the Bureau of Naval Personnel, via the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

PUBLIC RELATIONS

This is an election year. Never before has there been a time when the caliber of men seeking public office has been more important to the medical profession. Public health is the concern of local, state and federal officials, and proponents of compulsory health measures can be found on all three levels.

Doctors have been credited with indifference toward matters pertaining to government. State legislators have been heard to remark in public hearings that doctors never vote anyway, implying that the opinions of physicians can be passed over lightly in favor of groups exerting greater influence at the polls. In apparent contradiction is a statement by a national personage that each doctor is worth fifty votes.

These two ideas are not incompatible. Every medical man is a power in his own community. His opinions and judgments carry great weight, particularly on any matter dealing with health or medicine. It is equally true that this potent force for good government and competent public officials is entirely latent unless he voluntarily speaks his mind for others to hear and consider.

We are currently in the process of electing our next governor, members of the lower house and one-half the total number of senators. There has been an abundance of candidates for most of these offices. Now the major elimination has taken place. It is essential that a careful analysis of each candidate who has survived the first primary be made before the day of the second primary arrives. Take the small amount of time necessary to go the polls and vote.

In the past few years there has been adequate evidence of the importance of the man in the White House on matters of vital significance to the medical profession, and which affect the health and welfare of the public generally. Candidates for the highest office of the nation are numerous, even to third party aspirants. National conventions of the two major parties are nearing, and the presidential election is not too far in the future. The next four years are certain to be momentous in our country's history. The stature of the man chosen as chief executive needs more than superficial consideration.

Senator H. Alexander Smith, chairman of the Subcommittee on Health of the Senate Committee on Labor and Public Welfare, wrote a letter to the governor of each state. Among other relative questions, he asked whether the respective states prefer the Murray-Wagner-Dingell bill (S.1320) or the Taft measure (S.545). Florida was listed among the eight states having no preference. Medical public relations can claim no orchids on this.

STATE BOARD OF HEALTH

BIRTH AND DEATH CERTIFICATES

The importance of properly executed birth and death certificates has been steadily increasing within the last few years because of the increasing number of purposes for which these documents are required. The majority of the physicians in the state have been most conscientious in performing this public duty. In some instances, however, it has come to the attention of the State Board of Health, especially in the case of birth certificates, that physicians have refused to file these certificates with the local registrar because of the lack of payment of the medical fee. It is believed that such practices are a result of a misunderstanding and are due to the impression that the filing of the birth or death certificate is a service to the patient. This, however, is not the case. It is a service to the public and is required by law, and the medical license is issued with the understanding that these procedures will be carried out. The law relative to this matter reads as follows:

"CERTIFICATE OF BIRTH.—Within ten days after the date of each birth there shall be filed with the local registrar of the district in which the birth occurred a certificate of such birth. It shall be the duty of such physician, midwife or person acting as midwife, to file in accordance herewith the certificate herein contemplated.

DEATH CERTIFICATE.—The medical certificate shall be made and signed by the physician, if any, last in attendance on the deceased, who shall specify the time in attendance, the time he last saw the deceased alive and the hour of the day at which death occurred. And he shall further state the cause of death, so as to show the course of disease or sequence of causes resulting in the death, giving first the name of the disease causing death (primary cause), and the contributory (secondary) cause, if any, and the duration of each."

STATE NEWS ITEMS

The National Conference of County Medical Society Officers will sponsor another "Grass Roots" Conference during the annual session of the American Medical Association in Chicago next month. The conference will be held on Sunday, June 20th.

The fourteenth annual meeting of the American College of Chest Physicians will be held at the Congress Hotel in Chicago, June 17-20, 1948. The board of examiners of this organization announces that candidates for fellowship may arrange to take the examinations on June 17 by contacting the executive secretary of the college at 500 North Dearborn St., Chicago 10.

The American Physiotherapy Association will hold its twenty-fifth annual conference at the LaSalle Hotel in Chicago, May 23-28, 1948. Distinguished physicians and other lecturers will discuss the role of the physical therapist in the expanding program of medical care, including the contribution of this specialist to nursing education, and to the treatment of spinal cord injuries, nerve and tendon injuries of the hand, muscle re-education, poliomyelitis and peripheral vascular disease. The use of physical therapy in caring for the psychiatric patient is another subject to be presented.

Dr. B. L. Arms retired on February 15 and has purchased a home in Haines City where he plans to establish his permanent residency. Dr. Arms came to Jacksonville in 1917 as chief bacteriologist in the laboratory of the State Health Department. In 1925 he accepted the appointment as State Health Officer and served a full term of four years. Following his resignation he became affiliated with the Maine Health Department. In 1946 Dr. Arms returned to Florida and served as Health Officer for Jefferson County until his retirement.

Dr. Frederick J. Fox has recently opened offices at the corner of Knapp and Lakeshore Drive in Clermont.

Eleven members of the Florida Medical Association were registered at the January meeting of the American Academy of Orthopaedic Surgeons which was held in Chicago. Registrants include Drs. Charles R. Burbacher and Arthur H. Weiland of Coral Gables; Drs. Frank L. Fort and John F. Lovejoy of Jacksonville; Dr. Courtland D. Whitaker of Marianna; Dr. Edward W. Cullipher of Miami; Dr. Eugene L. Jewett of Orlando; Drs. Chas. L. Farrington and Irwin S. Leinbach of St. Petersburg; Drs. Herschel G. Cole and Joseph J. Ruskin of Tampa.

MARRIAGES AND DEATHS

MARRIAGES

Dr. Harry A. Peyton of Jacksonville and Mrs. Allen Killinger were married on March 13, 1948.

Dr. Etheridge J. Hall of Miami and Miss Weima Doris Davis of LaBelle were married on Feb. 26, 1948.

Dr. Robert W. Ferguson of Wauchula and Miss Beverly Jean Showalter of Tampa were married recently.

DEATHS—MEMBERS

Dr. Rollin Jefferson, Tampa ..... March 4, 1948

DEATHS—OTHER DOCTORS

Dr. Gustavo F. Porro, Tampa ..... Feb. 29, 1948
Dr. James E. Davis, St. Petersburg ..... March 19, 1948

COMPONENT SOCIETY NOTES

ALACHUA

Four physicians were elected to membership of the Alachua County Medical Society at the March meeting which was held at the Hotel Thomas in Gainesville. They are Drs. Raymond S. Camp, Albert G. Love, IV, Cecil E. Love, and Bernard L. Rhodes, Jr.

As the principal speaker, Dr. Camp reviewed the fundamentals of child feeding.

The meeting was held jointly with the Woman's Auxiliary.

BREVARD

The Brevard County Medical Society held its March meeting at the Brevard Hotel in Cocoa. Dr. Elwyn Evans of Orlando, the guest speaker, presented a paper entitled "Congenital Heart Disease."

ESCAMBIA

Members of the Escambia County Medical Society were guests of the medical staff of the Naval Hospital in Pensacola on March 9. At the meeting which was held at the Mustin Beach Officers' Club, welcoming addresses were given by Capt. R. E. Baker, Capt. W. E. Kellum, Sr., and Capt. J. G. Wright. Capt. John T. Smith presided.

The business meeting was conducted by Dr. George W. Morse, vice president of the Escambia society. Dr. C. R. Moon introduced the discussion topic, "Banti's Syndrome;" a case was presented by Dr. S. B. Berley and discussed by Drs. E. R. Freitas, J. Furr, M. M. Driskell, T. K. Hamilton, John Duval and Raymond B. Squires. A motion picture on "The Atomic Bomb and Radio Activity As a Problem" was shown.

MARION

The regular meeting of the Marion County Medical Society was held on St. Patrick's Day at "The 1890 House" in Ocala. Under a provision of the will of Mr. Arthur Levis of Ocala, a past commander of the Marion County Post of the American Legion, a portable electric oxygen tent has been donated for the use of patients in the county who are unable to pay for this apparatus in their homes. The report of the donation was made by Dr. T. Hartley Davis.

Dr. William H. Anderson, Jr., ophthalmologist and otolaryngologist, who has taken the offices and practice of the late Dr. Carney W. Mimms, Sr., of Ocala, was elected to membership.

Those present included Drs. Hugh H. Barfield, Richard C. Cumming, T. Hartley Davis, Bertrand F. Drake, Eaton G. Lindner, Carl S. Lytle, Eugene G. Peek, Robert E. Thompson, Thos. H. Wallis and Harry F. Watt of Ocala; Dr. Bruce D. Carroll of Bronson; Dr. William H. Garvin, Jr, of Dunnellon; and Dr. Herbert M. Webb, Jr., of Wildwood. Dr. Lindner had as his guest, Dr. C. W. Chidlaw of Hammond, Ind., who was his classmate at Miami Medical College in 1904.

PASCO-HERNANDO-CITRUS

Dr. William G. Mason was host to members of the Pasco-Hernando-Citrus County Medical Society at the March meeting which was held at the Orange Hotel in Inverness. Dr. J. Brown Farrior of Tampa spoke on "Fenestration Operation for Otosclerosis" and illustrated his paper with slides.

The business meeting consisted chiefly of discussions concerning the 74th Annual Meeting in St. Augustine.

PINELLAS

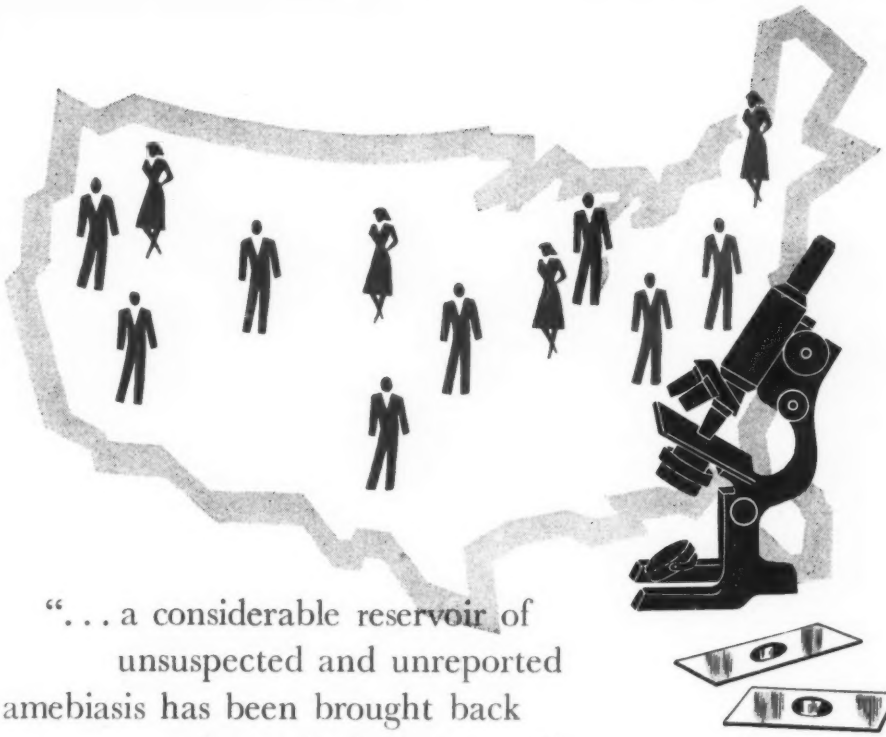
At the business meeting of Pinellas County Medical Society which was held on March 4, steps were taken to establish a blood bank. The motion by Dr. Ira C. Evans that President M. Eldridge Black appoint a committee as part of a composite committee for the project was carried. This group of physicians is empowered to invite laymen to join in the formation of an executive committee to establish and manage the proposed blood bank.

Dr. Francis H. Langley, chairman of the scientific program and entertainment committee, introduced Dr. James L. Gouaux who opened the discussion of a case of "Pericordial Cyst." Dr. Henry J. Jensen then explained the x-ray differential diagnosis. Dr. J. Braden Quicksall spoke on the "Intravenous Use of Morphine."

POLK

Members of the Polk County Medical Society were the guests of the Lake Wales physicians at the March meeting which was held at the Ridge Manor Lodge in Lake Wales. Dr. Edward Jelks of Jacksonville was the guest speaker. Following the dinner a business meeting was conducted by President Chester H. Murphy of Bartow.

Out-of-county Association members who were guests included Drs. Chas. J. Collins, Duncan T. McEwan, and Robert E. Zellner of Orlando; Dr.



"... a considerable reservoir of unsuspected and unreported amebiasis has been brought back to the United States...."[1]

Urging clinicians and roentgenologists to be on the alert for signs of this disease, Wilbur and Camp[2] note the frequency with which the radiologist finds unsuspected lesions, ultimately diagnosed as amebiasis.

Diodoquin . . . high-iodine-containing amebacide . . . "is a valuable addition to the therapeutic remedies available for the treatment of this insidious and intractable disease."[3]

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1. *Editorial: The Problem of Amebiasis, J.A.M.A.* 134:*1095 (July 26) 1947.*
2. *Wilbur, D. L., and Camp, J. D.: Amebic Disease of the Cecum: Clinical and Radiological Aspects, Gastroenterology* 7:*535 (Nov.) 1946.*
3. *Morton, T. C. St. C.: Diodoquin for Chronic Amoebic Dysentery in Service Personnel Invalided from India, Brit. M.J.* 1:*831 (June 16) 1945.*

Howard V. Weems of Sebring; Drs. David R. Murphey, Jr., James N. Patterson, and Chas. McC. Gray of Tampa. Dr. Alpheus T. Kennedy of Jacksonville also was a guest.

PUTNAM

Dr. Edward W. Ford of Crescent City has been elected president of the Putnam County Medical Society to succeed the late Dr. Allen P. Gurganious. Members who attended the February meeting which was held at the Country Club in Palatka were Drs. Grover C. Collins, Bernard E. Kane, James W. Brantley and Dr. Ford.

ST. JOHNS

All members the St. Johns County Medical Society have paid their state dues for 1948. This cooperation is greatly appreciated.

VOLUSIA

Dr. Frank G. Slaughter of Jacksonville, chairman of the Committee on Public Relations, was the guest speaker at the monthly meeting of the Volusia County Medical Society which was held on March 9 at the Halifax District Hospital in Daytona Beach. The topic of his talk was "The Doctor and the Public." Mr. Ernest R. Gibson, executive secretary of the Academy of Public Medicine, discussed proposals for public relations by county medical societies.

Thirty-two members of the society attended the meeting.

INTERNIST: 34, Diplomate of the American Board of Internal Medicine, graduate of an eastern school, Protestant, presently on faculty of a southern medical school and consultant to U. S. Veterans' Hospital, desires opportunity for private practice, group or association. Write 69-16, P. O. Box 1018, Jacksonville, Fla.

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THEODORE GAILLARD CROFT

Dr. Theo. G. Croft of Jacksonville died on Wednesday, March 17, 1948 in the Presbyterian Hospital in New York City. He was 60 years of age.

Dr. Croft was born on Aug. 26, 1887 in Aiken, S. C. Descended from a distinguished family of his native state, he was the son and grandson of physicians bearing the same name, and his mother was Mary Chafee Croft. He attended the Sewannee Military Academy, later the University of the South, before entering the University of South Carolina. In June 1912, he received the degree of Doctor of Medicine from the Medical College of the State of South Carolina at Charleston, as had his father and grandfather before him. Immediately thereafter he spent two years in New York interning at New York City Hospital and Bellevue Hospital.

Dr. Croft, who resided at Mandarin, had practiced medicine in Jacksonville since 1914 and was widely known as a general surgeon. Not only did he win distinction professionally through the years but also in civic and social activities. He was a Mason and a Shriner, a member of the Kiwanis Club, the Royal Order of Jesters and the Timuquana Country Club, and a life member of the Florida Yacht Club. He was a member of the Episcopal Church. His colleagues, his patients and a wide circle of friends held him in highest esteem.

Dr. Croft saw service in France as a first lieutenant in World War I and held a commission of lieutenant colonel as a reserve officer. During World War II, he was asked to supervise the medical departments of the St. Johns River Shipbuilding Company and the Merrill-Stevens Drydock Company, and he served on the procurement and assignment committee.

He was a member of the American Medical Association, the Florida Medical Association and the Association of Seaboard Air Line Railroad Surgeons. In his death the Duval County Medical Society loses a past president who served faithfully and well in the capacity in 1934. Locally, he was a member of the staff of St. Luke's, St. Vincent's and Duval County hospitals.

Survivors include his widow, Mrs. Mabel Storey Croft, and two sisters, Mrs. Mary Croft Lyons and Miss Florence Ella Croft of Aiken, S. C.

BOOKS RECEIVED

Introduction to Medical Psychology. By L. Erwin Wexberg, M.D. Price, $3.50. Pp. 169. New York: Grune & Stratton, Inc., 1947.

Realizing the need for a textbook written with the future physician's specific psychologic requirements in mind, the author prepared this short text primarily to aid the medical student familiarize himself with a subject practically unknown to him. Not just an "introduction" to psychiatry or mental hygiene, nor on the other hand an elaborate treatise on psychology designed for the training of psychologists, this brief volume should prove helpful not only to the student but also to those practicing physicians who are coming to realize more and more the importance of psychologic training in medicine.

The six chapters are entitled Individual and Community; Knowledge and Action; Emotions and Instincts; Temperament, Personality and Character; Genetic Psychology; and Methods and Technics of Clinical Psychology. Numerous references accompany each chapter.

Fundamentals of Psychiatry. By Edward A. Strecker, M.D. Ed. 4. Price, $4.00. Pp. 325. Philadelphia: J. B. Lippincott Company, 1947.

This practical and popular textbook, now appearing in its fourth edition within five years, takes into account the greatly increased need for psychiatric care in this postwar era and the critical shortage of specially trained physicians in this branch of medicine. All the best features of previous editions are retained. The author continues to emphasize the relationship between psychiatry and general medicine and to cover compactly symptoms, methods of examination, etiology, treatment and prognosis of psychoses. In addition, there are many new features, including an entirely new chapter on Psychosomatic Medicine and Psychiatry, a discussion of classification insufficiencies and two suggested nomenclatures, which reflect the present trend in psychiatric thought.

This small manual is especially useful to practitioners, nurses, students and others requiring a sound, general knowledge of psychiatry. Designed to meet the need when time is at a premium, it guides the busy physician in meeting the psychiatric problems of everyday practice without leading him too deeply into technical or theoretical consideration of the highly complex subject matter.

A Primer of Cardiology. By George E. Burch, M.D., F.A.C.P., and Paul Reaser, M.D. Price $4.50. Pp. 272. Philadelphia: Lea & Febiger, 1947.

These authors, of the faculty of Tulane University School of Medicine, present in clear, informative style this primer for medical students and physicians who are interested in a practical introduction to cardiology. Their

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From where I sit
by Joe Marsh

How to put up with women's styles

When Will Dudley's missus finally gave in to the new-style longer skirts, Will was mighty critical at first. Allowed as how women were a slave to fashion . . . ought to dress to please their husbands and not style designers.

Then Dee finally reminded Will of his habit of sitting by the radio on Saturday afternoons in his shirt sleeves and old carpet slippers, listening to the sportscasts with a mellow glass of beer. She suggested that maybe Will was a slave to comfort.

And Will admitted she was right. It just goes to show that the way somebody dresses isn't always to our taste —just as Will's glass of beer may be another person's cider.

But from where I sit, those little differences aren't important—unless we go out of our way to make them so, by being hypercritical. As Will says now: "Well, anyway, those long skirts hide a multitude of shins". . . and lets it go at that!

Joe Marsh

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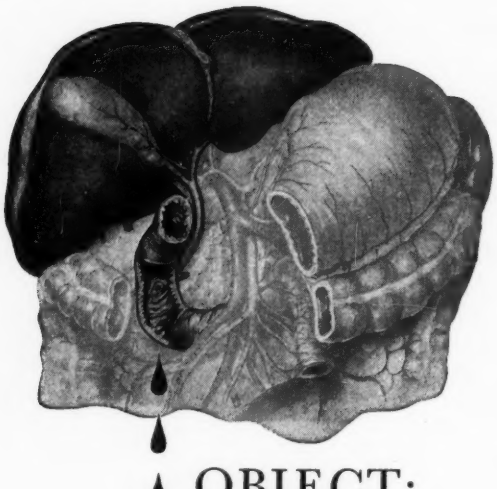

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*Albrecht, F. K.: Modern Management in Clinical Medicine, Baltimore, The Williams and Wilkins Co., 1946, p. 170.

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aim is to show in a fairly direct fashion how the basic sciences and clinical medicine must be integrated and approached systematically in order to understand cardiology satisfactorily and to establish a foundation for future study, clinical development and specialty training. Emphasis is placed on cardiac problems likely to be of greatest importance in medical practice. The material is presented in a way to stimulate the thinking of the reader, making him better able to evaluate the literature in this field, and the illustrations, numbering 203, are intended to teach him to think of clinical manifestations in terms of circulatory dynamics and basic physiologic principles.

UNIPOLAR LEAD ELECTROCARDIOGRAPHY, INCLUDING STANDARD LEADS, UNIPOLAR EXTREMITY LEADS AND MULTIPLE UNIPOLAR PRECORDIAL LEADS. By Emanuel Goldberger, B.S., M.D. Price $4.00. Pp. 182. Philadelphia: Lea & Febiger, 1947.

This monograph is the result of a thorough study of unipolar leads including exploration of the practicability of their routine clinical use and determination of the relationships between standard leads, precordial leads and unipolar leads in general. It contains the material used in the author's course in advanced electrocardiography at Montefiore Hospital, New York, under the auspices of Columbia University Faculty of Medicine. In contrast to the usual description of electrocardiographic patterns in terms of standard leads alone, or in terms of standard leads and one or more precordial leads, in this volume each abnormality is described in terms of the three standard leads, the three 'augmented' unipolar extremity leads and the six unipolar precordial leads. All of these leads are explained in terms of simple fundamental physiologic principles and basic unipolar lead patterns. Among the many clinical conditions in which unipolar extremity leads and unipolar precordial leads are advantageous are the interpretation of axis deviation; the diagnosis of abnormalities of the Q waves, especially Q_3; the differentiation of pulmonary embolism from posterior infarction; the diagnosis of small myocardial infarcts; the diagnosis of bundle branch block; the diagnosis of right ventricular hypertrophy; the interpretation of tracings with abnormalities of the RS-T segment and T wave, and the interpretation of tracings when standard leads appear normal or when minimal changes are present in the standard leads.

THE FOOT AND ANKLE, THEIR INJURIES, DISEASES, DEFORMITIES AND DISABILITIES. By Philip Lewin, M.D., F.A.C.S. Ed. 3. Price $11.00. Pp. 847. Philadelphia: Lea & Febiger, 1947.

Extensively revised with an increase of 182 pages and 102 new illustrations, this volume contains the latest recognized facts and reflects the present day accepted concepts of etiology, diagnosis and treatment. Other features are the latest data on the use of penicillin, streptomycin, tyrothrycin, the sulfa drugs and sulfamylon; technic described and illustrated in detail; and additional emphasis on compound fractures, crushing wounds, osteomyelitis, traumatic gangrene and amputations. There is an entirely new discussion of psychosomatic medicine as it relates to certain orthopedic conditions. This book should be valuable to obstetricians, pediatricians and general practitioners in the treatment of some of the common foot and ankle defects and should help them in the recognition of the necessity of appropriate and prompt treatment. It covers from all of the practical points of view a subject not well known and concerning which relatively little has been written.

Surgical Disorders of the Chest, Diagnosis and Treatment. By J. K. Donaldson, M.D., F.A.C.S., (Lt. Col., A.U.S.). Ed. 2. Price $8.50. Pp. 485. Philadelphia: Lea & Febiger, 1947.

This book on the clinical pathology, diagnosis and surgical treatment of disorders of the chest serves as a well organized reference work, in compact and easily readable form, for physicians, surgeons and medical students. It is written especially from the viewpoint of the general practitioner who first sees the patient and knows that immediate recognition and referral are of the utmost importance, and the general surgeon who finds it practical and advisable to handle all but the most specialized forms of chest surgery. In this new edition there are 120 additional pages, and 22 of the 145 illustrations are new. Additions to the text matter include the fundamental advances made in the field of thoracic surgery in World War II and a new chapter on Traumatic Hemothorax, with a full consideration of the newer concepts of decortication of the lung. Other subjects covered are inflammation of the thoracic wall, including pyogenic infections and abscesses, tumors, penetrating and nonpenetrating wounds, and nontuberculous intrathoracic infections, pulmonary embolism and infarction. Two chapters are devoted to pleurisy, with special emphasis on treatment.

Diseases of the Nose, Throat and Ear. By William Lincoln Ballenger, M.D., F.A.C.S., Howard Charles Ballenger, M.D., F.A.C.S., and John Jacob Ballenger, M.D. Ed. 9. Price $12.50. Pp. 993. Philadelphia: Lea & Febiger, 1947.

This ninth edition, thoroughly revised with 597 illustrations and 16 plates, many of them new, covers the entire field of otolaryngology, including the anatomy, functions and medical and surgical treatment of all of the leading diseases. A new chapter offers guidance in clarifying headaches and neuralgias of the face and head, symptoms of diverse and often baffling origin. Rhinoplastic reconstruction is described and the steps illustrated. Dr. J. D. Kelly has revised his technic of arytenoidectomy for bilateral paralysis of the recurrent laryngeal nerves. The chapters dealing with the subjects of the physiology and functional tests of the labyrinth and inflammatory diseases of the labyrinth have been revised by Dr. Alfred Lewy, and Drs. Gabriel Tucker and C. L. Jackson have revised their chapters on peroral endoscopy. The final section presents bronchoscopy, direct laryngoscopy, esophagoscopy and gastroscopy. This comprehensive book, based on a broad clinical viewpoint, is for the general practitioner as well as the specialist.

Practical Child Guidance and Mental Hygiene. By Samuel Kahn, M.D., Ph.D., Grace Kirsten, A.B., and May Elish March, A.B., M.A. Price $4.00. Pp. 285. Boston: Meador Publishing Company, 1947.

This book attempts through question and answer form to explain to the average intelligent person some of the important principles in child guidance and how they can be applied practically. It is intended "for parents, potential parents, educators, social workers, physicians, lawyers, ministers, executives, institutional workers and all others interested in the development of normal, wholesome individuals of good personality and fine character." The authors would contribute to a better world by making more people Child Guidance-minded.

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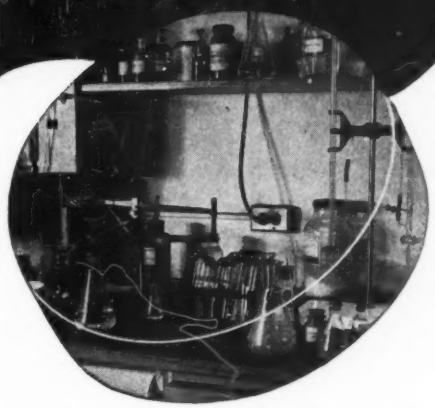

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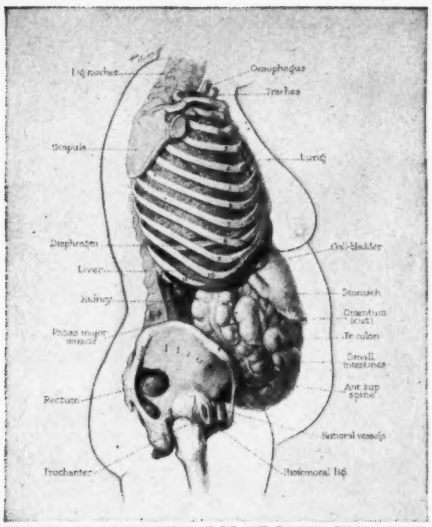

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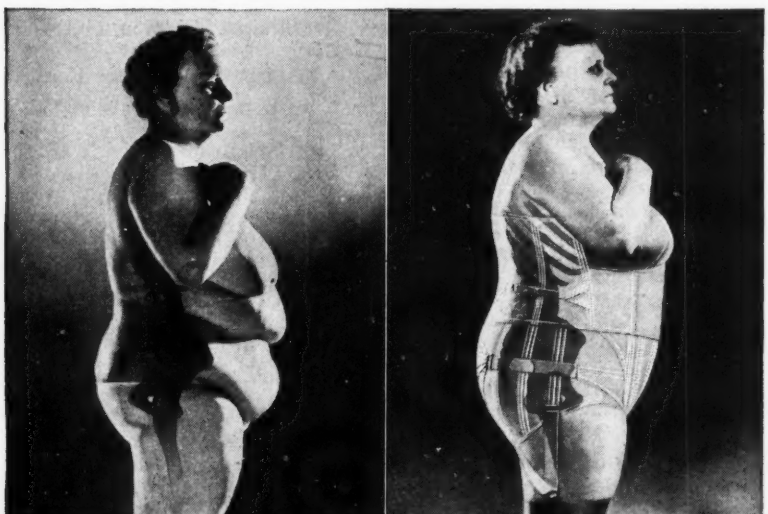

Photographs—Obese patient with 3rd degree pendulous abdomen and arthritis of the spine before and after application of abdominal and breast supports. (Skeletons indrawn.)

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